CLAIMS LISTING

1.(original) A stimulable phosphor screen or panel comprising a phosphor layer and a support characterized in that an intermediate layer arrangement of an X-ray absorbing foil or layer and, farther from the support, a stimulated light reflecting foil is present between said support and said phosphor layer.

2.(original) A stimulable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises an X-ray absorbing layer, wherein as a lead compound an oxide or a hydroxide of lead metal is dispersed in a binder and wherein said binder containing the lead compound is a matrix of a polycondensation product of a metal alkoxide species.

3.(original) A stimulable phosphor screen or panel according to claim 2, wherein said binder containing the lead compound is a matrix of an inorganic network of alkoxymetal substituted organic polymers or copolymers matrix.

4.(original) A stimulable phosphor screen or panel according to claim 3, wherein said matrix is derived from a cross-linking agent selected from the group consisting of dialkoxysilanes, trialkoxysilanes, tetraalkoxysilanes, titanates, zirconates and aluminates; and a colloid of

silica, and wherein said matrix comprises a colloid of an oxide or a hydroxide of lead metal.

5.(original) A stimulable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises, as an X-ray absorbing layer a layer of lead.

6.(original) A stimulable phosphor screen or panel according to claim 1, wherein as a stimulated light reflecting foil an aluminum layer is present.

7.(original) A stimulable phosphor screen or panel according to claim 2, wherein as a stimulated light reflecting foil an aluminum layer is present.

8.(original) A stimulable phosphor screen or panel according to claim 3, wherein as a stimulated light reflecting foil an aluminum layer is present.

9.(original) A stimulable phosphor screen or panel according to claim 4, wherein as a stimulated light reflecting foil an aluminum layer is present.

10.(original) A stimulable phosphor screen or panel according to claim 5, wherein as a stimulated light reflecting foil an aluminum layer is present.

11.(original) A phosphor screen or panel according to claim 1, wherein said support is selected from the group consisting

of ceramics, glass, amorphous carbon, aluminum and polymeric films.

12. (original) A phosphor screen or panel according to claim 6, wherein said support is selected from the group consisting of ceramics, glass, amorphous carbon, aluminum and polymeric films.

13. (original) A phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement has a surface that has been subjected to embossing for forming a fine concavo-convex pattern.

14. (original) A phosphor screen or panel according to claim 6, wherein said intermediate layer arrangement has a surface that has been subjected to embossing for forming a fine concavo-convex pattern.

15. (original) A phosphor screen or panel according to claim 11, wherein said intermediate layer arrangement has a surface that has been subjected to embossing for forming a fine concavo-convex pattern.

16. (original) A phosphor screen or panel according to claim 12, wherein said intermediate layer arrangement has a surface that has been subjected to embossing for forming a fine concavo-convex pattern.

17.(original) A phosphor screen or panel according to claim 1, having between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

18.(original) A phosphor screen or panel according to claim 6, having between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

19.(original) A phosphor screen or panel according to claim 11, having between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

20.(original) A phosphor screen or panel according to claim 12, having between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

21.(original) A phosphor screen or panel according to claim 1, having between said intermediate layer arrangement and the phosphor layer a moisture-repellent parylene layer.

22.(original) A phosphor screen or panel according to claim 6, having between said intermediate layer arrangement and the phosphor layer a moisture-repellent parylene layer.

23.(original) A phosphor screen or panel according to claim 11, having between said intermediate layer arrangement and the phosphor layer a moisture-repellent parylene layer.

24.(original) A phosphor screen or panel according to claim 12, having between said intermediate layer arrangement and the phosphor layer a moisture-repellent parylene layer.

25.(original) A phosphor screen or panel according to claim 1, having between said intermediate layer arrangement and the phosphor layer and between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

26.(original) A phosphor screen or panel according to claim 6, having between said intermediate layer arrangement and the phosphor layer and between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

27.(original) A phosphor screen or panel according to claim 11, having between said intermediate layer arrangement and the phosphor layer and between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

28.(original) A phosphor screen or panel according to claim 12, having between said intermediate layer arrangement and the phosphor layer and between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

29. (original) A phosphor screen or panel according to claim 1, wherein said phosphor is a binderless phosphor, having needle-shaped crystals.

30. (original) A phosphor screen or panel according to claim 6, wherein said phosphor is a binderless phosphor, having needle-shaped crystals.

31. (original) A phosphor screen or panel according to claim 11, wherein said phosphor is a binderless phosphor, having needle-shaped crystals.

32. (original) A phosphor screen or panel according to claim 12, wherein said phosphor is a binderless phosphor, having needle-shaped crystals.

33. (original) A binderless stimulable phosphor screen or panel according to claim 29, wherein said needle-shaped phosphor crystals are crystals of an alkali metal phosphor.

34. (original) A binderless stimulable phosphor screen or panel according to claim 30, wherein said needle-shaped phosphor crystals are crystals of an alkali metal phosphor.

35. (original) A binderless stimulable phosphor screen or panel according to claim 31, wherein said needle-shaped phosphor crystals are crystals of an alkali metal phosphor.

36.(original) A binderless stimulable phosphor screen or panel according to claim 32, wherein said needle-shaped phosphor crystals are crystals of an alkali metal phosphor.

37.(original) A binderless stimulable phosphor screen according to claim 29, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

38.(original) A binderless stimulable phosphor screen according to claim 30, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

39.(original) A binderless stimulable phosphor screen according to claim 31, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

40.(original) A binderless stimulable phosphor screen according to claim 32, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

41.(original) A binderless stimulable phosphor screen according to claim 33, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

42.(original) A binderless stimulable phosphor screen according to claim 34, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

43.(original) A binderless stimulable phosphor screen according to claim 35, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

44.(original) A binderless stimulable phosphor screen according to claim 36, wherein said alkali metal phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.